## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB2004/002119

|                             |  | PCT/IB2004/002119  |
|-----------------------------|--|--|
| A.                          | CLASSIFICATION OF SUBJECT MATTER   |  |
| Int. C1. 7:                 | G06F 15/18   |  |
| According to                | International Patent Classification (IPC) or to both national classification and IPC   |  |
| B.                          | FIELDS SEARCHED  |  |
| Minimum doc                 | umentation searched (classification system followed by classification symbols)   | · .  |
|                             |  | •  |
| Documentatio                | n searched other than minimum documentation to the extent that such documents are included   | l in the fields searched   |
| Electronic data<br>WPAT, US | a base consulted during the international search (name of data base and, where practicable, sea<br>PTO, IEEE XPLORE (associative, neuron, sequences, layer, inputs, expressi | arch terms used)   |
| C.                          | DOCUMENTS CONSIDERED TO BE RELEVANT  | ion)   |
| Category*                   | Citation of document with in 12 at 1   | <del></del>  |
|                             | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No.  |
| х                           | US 6052679 A (APARICIO, IV et al.) 18 April 2000   |  |
|                             | Abstract, columns 1,2, column 16 lines 1-20  | 1-3  |
| 7.5                         | US 5937432 A (YAMAGUCHI et al.) 10 August 1999   |  |
| X<br>Y                      | Abstract, figures Column 1 line 52 to column 2 line 11   | 1,10,30,98,99  |
| •                           | Column 1 line 32 to column 2 line 11   | 100,101  |
|                             | US 5852815 A (THALER) 22 December 1998   |  |
| X                           | Abstract, figures  | 32,36,40   |
| ,                           | WO 05/00020 A1 /77777 77   |  |
| $\mathbf{x}$                | WO 95/00920 A1 (THE UNITED STATES OF AMERICA, represented by SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICE   | by the THE   |
|                             | 1 222, Whole document, especially  |  |
| Y                           | Page 5 lines 24-31, page 7 lines 10-22, page 9 lines 14-18, page 27 lines 1  | 30,98,99<br>-3, Fig. 13 100,101  |
| X F                         |  |  |
|                             | categories of cited documents:   | ent family annex   |
| "A" docume:                 | nt defining the general state of the art which is "T" later document published after the international   | onal filing date or priority date and not in                                   |
| •                           | underlying the invention   | derstand the principle or theory   |
| meman                       | onal Hing date or cannot be considered to involve an inve  | ned invention cannot be considered novel ntive step when the document is taken |
| "L" document or which       | nt which may throw doubts on priority claim(s)  "Y"  document of particular relevance: the claim   | red invention compaths and the   |
| another                     | citation or other special reason (as specified)  | nt is combined with an a series of   |
| or other                    | means "&" document member of the same patent famil   | y  |
| out later                   | nt published prior to the international filing date than the priority date claimed   | •  |
| Date of the actu            | al completion of the international search  Date of mailing of the international  | l search report  |
| 24 September                | · ·  | 2 9 SEP 2004   |
|                             | ing address of the ISA/AU Authorized officer   |  |
| O BOX 200, 1                | PATENT OFFICE<br>WODEN ACT 2606, AUSTRALIA   |  |
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International application No.

PCT/IB2004/002119

| C (Continuation |  | B2004/0    | 02117                          |  |
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|                 | 10 DD ADEDVANI   |            |                                |  |
| Category*       | Citation of document, with indication, where appropriate, of the relevant passages   |            | Relevant to claim No.          |  |
| Y               | HUMPERT, B. "BIDIRECTIONAL ASSOCIATIVE MEMORY WITH SEVER PATTERNS" IJCNN 1990 17-21 June 1990 Section 3, Section 4, Figures  | AL         | 1-3,<br>10,30,98,99<br>100,101 |  |
| Y               | WANG L. "Multi-associative neural networks and their applications to learning retrieving complex spatio-temporal sequences" IEEE Transactions on Systems, I and Cybernetics February 1999  Whole document, especially Figure 2, section II | and<br>Man | 1-3,<br>10,30,98,99<br>100,101 |  |
|                 |  |            |                                |  |
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Information on patent family members

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

| Patent Document Cited in<br>Search Report |         |    |          |             |         |             |             |
|---|---------|----|----------|-------------|---------|-------------|-------------|
| US  | 6052679 |    |          | <del></del> |         |             |             |
| US  | 5937432 | JP | 9231189  |             |         |             | <del></del> |
| US  | 5852815 | AU | 21120/97 | CA          | 2243120 | EP          | 0892957     |
|   |         | US | 5845271  | US          | 5852816 | US          | 6014653     |
|   |         | wo | 9727525  |             |         |             |             |
| wo  | 9500920 | AU | 72110/94 | US          | 5446829 | <del></del> |             |

Due to data integration issues this family listing may not include 10 digit Australian applications filed since May 2001.

END OF ANNEX